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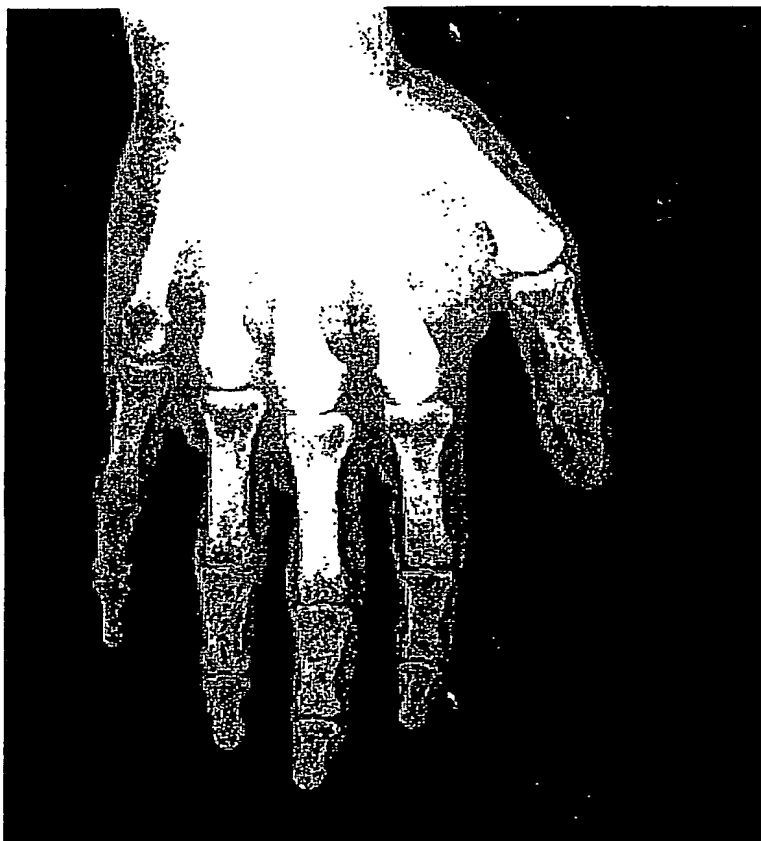
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- (71) Applicant (for all designated States except US): **UNIVERSITA' DEGLI STUDI DI TRIESTE [IT/IT]; Piazzale Europa, 1, I-34127 TRIESTE (IT).**
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **COSMI, Francesca [IT/IT]; Via Aquileia, 73, I-33100 UDINE (IT).**
- (74) Agent: **PETRAZ, Gilberto; GLP Srl, Piazzale Cavedalis, 6/2, I-33100 UDINE (IT).**
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[Continued on next page]

(54) Title: **METHOD TO IDENTIFY THE MECHANICAL PROPERTIES OF A MATERIAL**



(57) Abstract: Method to identify the mechanical properties of a material starting from at least a digitalized image of a sample of the material. The image of the sample to be analyzed is processed to achieve a numerical model comprising a determinate number of elementary geometric elements, or cells, to each of which a parameter to identify the type of matter is assigned, in order to obtain information on the distribution of the mechanical characteristics in the individual units of the sample, from which it is possible to trace both the elastic characteristics and hence the resistance, and also the distribution of stresses and strain in relation to the application of the loads.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G06F19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>ISHIDA T ET AL: "TRABECULAR PATTERN ANALYSIS USING FRACTAL DIMENSION" JAPANESE JOURNAL OF APPLIED PHYSICS, PUBLICATION OFFICE JAPANESE JOURNAL OF APPLIED PHYSICS. TOKYO, JP, vol. 32, no. 4, PART 4, April 1993 (1993-04), pages 1867-1871, XP001092781 ISSN: 0021-4922 page 1868, right-hand column, line 13 -page 1869, left-hand column, line 3 --- -/--</p>	1



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Chateau, J-P

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International Application No
PCT/IB 03/01127

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>TONTI E: "A DIRECT DISCRETE FORMULATION OF FIELD LAWS: THE CELL METHOD" COMPUTING MODELING IN ENGINEERING AND SCIENCES, TECH SCIENCE PRESS, PALMDALE, CA, US, vol. 2, no. 2, 2001, pages 237-258, XP008024158 ISSN: 1526-1492 cited in the application the whole document</p>	1
A	<p>WO 01 32079 A (ARTHROLAB INC) 10 May 2001 (2001-05-10) page 18, line 20 -page 19, line 16</p>	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
WO 0132079	A	10-05-2001	AU	1122401 A		14-05-2001
			WO	0132079 A2		10-05-2001
			CA	2427590 A1		10-05-2001
			EP	1230561 A2		14-08-2002
			US	6560476 B1		06-05-2003
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